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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. 4	CONFIRMATION NO.
10/026,172	12/21/2001	Teruhiko Fujisawa	R6377a	9434
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EPSON RESEARCH AND DEVELOPMENT INC			DESIR, PIERRE LOUIS	
INTELLECTUAL PROPERTY DEPT 150 RIVER OAKS PARKWAY, SUITE 225		ART UNIT	PAPER NUMBER	
SAN JOSE, CA			2681	
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	10/026,172	FUJISAWA ET AL.	
Office Action Summary	Examiner	Art Unit	
	Pierre-Louis Desir	2681	
The MAILING DATE of this commun. Period for Reply	ication appears on the cover sheet w	ith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNI - Extensions of time may be available under the provisions after SIX (6) MONTHS from the mailing date of this commondary of the period for reply specified above is less than thirty (3). If NO period for reply is specified above, the maximum statement of the period for reply any reply received by the Office later than three months a earned patent term adjustment. See 37 CFR 1.704(b).	CATION. of 37 CFR 1.136(a). In no event, however, may a nunication. 0) days, a reply within the statutory minimum of thi atutory period will apply and will expire SIX (6) MO will, by statute, cause the application to become A	reply be timely filed rty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) file	d on		
· _ ·	 2b)⊠ This action is non-final.		
3)☐ Since this application is in condition closed in accordance with the praction	•	•••	
Disposition of Claims			
4) ⊠ Claim(s) <u>1-26</u> is/are pending in the a 4a) Of the above claim(s) is/a 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-26</u> is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restrict	re withdrawn from consideration.		
Application Papers			
9) The specification is objected to by the 10) The drawing(s) filed on 21 December Applicant may not request that any object Replacement drawing sheet(s) including 11) The oath or declaration is objected to	r 2001 is/are: a)⊠ accepted or b)[ction to the drawing(s) be held in abeya the correction is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) △ Acknowledgment is made of a claim a) △ All b) ☐ Some * c) ☐ None of: 1. △ Certified copies of the priority 2. ☐ Certified copies of the priority 3. ☐ Copies of the certified copies	documents have been received. documents have been received in a of the priority documents have been nal Bureau (PCT Rule 17.2(a)).	Application No n received in this National Stage	
Attachment(s)			
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (P 		Summary (PTO-413) (s)/Mail Date	
 2) Information Disclosure Statement(s) (PTO-1449 or Paper No(s)/Mail Date 7. 		Informal Patent Application (PTO-152)	

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-2, 7-8,10-11, 17-18, 22, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engelmann, U.S. Patent No. 6335906 in view of Tsukamoto, U.S. Patent No. 6359837.

Engelmann discloses a portable object (i.e. wrist-watch) (see fig.1) in particular a timepiece, having a mechanically driven time display (see fig. 1), and an electronic module intended to allow contactless and wireless communication between the portable object and an external terminal provided for this purpose (see col. 1, lines 6-11). Although Engelmann discloses a wrist-watch device with the characteristics above, Engelmann fails to specifically disclose a wrist-watch device with a timepiece module including a mechanically driven time display member that displays the time nor does he disclose a wrist-watch device with a timepiece control unit that controls said time display member to display information in accordance with said stored data. Additionally, Engelmann did not specifically disclose of a wrist-watch that is comprising of a

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comparator unit that compares a value of said stored data with a value of predetermined data, and that generates comparison result data

However, Tsukamoto discloses a wrist-watch device having a wireless communication device (see fig. 1, col. 4, line 67 and col. 5, line 1) comprising of a wireless communication circuit (i.e. a communication unit that implements wireless data connection and which comprises a modulation circuit for exchanging data with an external apparatus) (see fig. 2 and 3, col.7, lines 51-53 and col. 6 lines 6-8). Tsukamoto also discloses of a time measurement control program executed by the controller of the wristwatch. Tsukamoto additionally discloses in fig. 7A an example of the date display on the liquid crystal display of the wristwatch, which example displays date information and time information (i.e. display the date and time information separately using different dial) (see fig. 7A, col. 9, lines 2-5) (note: That display makes it apparent and obvious that key inputs must be included to direct a display of either the day of the week or the month, or even the time, which should come automatically being a timepiece). Tsukamoto further discloses a wrist-watch device having a time measurement circuit for generating a date signal which represents the current date and time (see fig. 3, col. 7, lines 18-19), a key input unit for generating a key signal for, e.g., time adjustment (see fig. 3, col. 7, lines 21-22) (note: a key input to mechanically adjust time), a liquid crystal display serving as a display unit, a memory (i.e. recording medium) for storing a control program that implements a time measurement function (see fig. 3, col. 7, lines 22-24), and a controller for controlling the entire wristwatch by executing the control

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program (see fig. 3, col. 7, lines 26-28). Tsukamoto additionally discloses a wrist-watch device where the time measurement control program is executed by the controller of the wristwatch (a function of the controller) where the program reads a date signal from the time measurement circuit (i.e. reads data from wireless communication circuit), and checks (i.e. compares) if the communication unit has received data from the electronic still camera (i.e. external wireless device), and if the data received has the correct format then display the data on the liquid crystal display (i.e. if a data request is detected. the latest date signal at that time is transmitted from the antenna via the communication unit) (see fig. 6, col. 7 lines 61-67, and col. 8, lines 1, and 6-10, and col. 14 lines 3-5) (for e.g., if the displayed information is different from the predetermined one, the external wireless device would send a signal to the timepiece control for updating the new information). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the device as taught by Engelmann with the device as taught by Tsukamoto because such features would enhance the capabilities of the wrist-watch device, and because such an addition would give to the device the capability where its transmission circuit (transmission means) of the timepiece can transmit data in response to predetermined operation (col. 16, lines 10-13).

3. Claims 9, 15, 19-20, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukamoto, U.S. Patent No. 6359837 in view of Engelmann, U.S. Patent No. 6335906.

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Regarding claims 9, 20, and 24, Tsukamoto discloses a wrist-watch device as described above (see Claims 1 and 17 rejection above). Tsukamoto additionally discloses of a wrist-watch device comprising a housing (see fig. 14, col. 11, line 18). Tsukamoto does not specifically disclose a wrist-watch device having a switch positioned on said housing and where said timepiece control unit is responsive to actuation of the switch for controlling said time display member to display information in accordance with the stored data. However, Engelmann discloses a wristwatch, includes a case (i.e. housing) with which are associated at least two different electronic modules, each module allowing access to a particular service, the portable object also including a selection switch, which is able to be actuated manually, for selecting and activating one of said electronic modules as a function of the service desired by the user (see abstract, fig. 1, and col. 3, lines 34-35). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to improve upon the wrist-watch device as taught by Tsukamoto by combining it with the wrist-watch device as described by Engelmann in order to allow the time piece control unit (referring to claims 1 and 17 rejection above) to respond to the actuation of the switch because it would simplify the user's task, and to allow him rapidly to select the service he desires (see fig. 1, col. 3, lines 43-44).

Regarding claim 15, Tsukamoto discloses a wrist-watch device as described above (see Claims 1 rejection above). Although Tsukamoto discloses a wrist-watch device with the characteristics above, Tsukamoto fails to

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specifically disclose a wrist-watch device, where the memory stores prepaid card data. However, Engelmann discloses a portable object (i.e. wristwatch) (see abstract) where information, identification or other data are written into and read from a memory in a contactless and wireless manner (i.e. the memory stores card data) (see col. 1, lines 27-30, and 65-67). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to improve upon the wrist-watch device as taught by Tsukamoto by combining it with the characteristics as described by Engelmann wrist-watch device as described by Engelmann in order to obtain a wrist-watch device where the memory would store prepaid card data because it would allow access control, whether upon payment or free of charge, is made easier and quicker (see col. 1, lines 64-65).

4. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukamoto, U.S. Patent No. 6359837 in view of liyama et al. (liyama), U.S. Patent No. 6489883.

Regarding claim 13, Tsukamoto discloses a wrist-watch device as described above (see Claims 1 rejection above). Although Tsukamoto discloses a wrist-watch device with the characteristics above, Tsukamoto fails to specifically disclose a wrist-watch device where the wireless communication circuit comprises an IC chip including a communicator that modulates and demodulates data, and a controller that controls individual elements. However, liyama discloses a non-contact data carrier system, for communicating by use of

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a radio wave (wireless communication function), where a non-contact IC card (i.e. IC chip) is an example of such system (see abstract, and col. 1, lines 5-8). Included in the system discloses by liyama is modulation and demodulation circuit to modulate and demodulate data, which are connected to a control circuit (see fig. 1, lines 26-29, and col. 7, lines 3-14). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to improve upon the wrist-watch device as taught by Tsukamoto by implementing the characteristics of liyama's system described above because it would provide high confidentiality measure to the wrist-watch device (see col. 5, lines 24-25).

Regarding claim 14, Tsukamoto discloses a wrist-watch device as described above (see Claims 1 rejection above), in which in which a power supply circuit for supplying electric power from a battery (i.e. power supply voltage generator) (see fig. 2, col. 6, lines 10-16). Although Tsukamoto discloses a wrist-watch device with the characteristics mentioned above, Tsukamoto fails to specifically disclose a wrist-watch device where the power supply voltage generator receives a signal from the external wireless device and then generates a power supply voltage from the received signal, and the timepiece control unit reads data from the wireless communication circuit by using the generated power (known in the art of wireless communication). However, liyama discloses a non-contact data carrier system, for communicating by use of a radio wave (wireless communication function) (see abstract), a battery (power supply voltage generator), and an electric-supply

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circuit for rectifying a received carrier signal and generating; as a result, when the battery is capable of supplying power, power is supplied from the battery, so that long-distance communication is realizable power (see abstract, and col. 4 lines 10-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made (since it is well known in the wireless communication community to have a device with a wireless communication circuit comprising of a power battery which receives signal from external wireless device and generate power supply voltage from the signal received) to improve upon the device as taught by Tsukamoto with the characteristics of liyama's device to obtain a device with a wireless communication circuit comprising of a power battery which receives signal from external wireless device and generate power supply voltage from the signal received because it would give the ability to the device where, in case of battery exhaustion, the power is supplied from the electric-supply circuit which rectifies the carrier signal (which would render the battery to perform better) (see abstract).

5. Claims 3-6, 12, 16, 19, 21, 23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukamoto and Engelmann (as applied to claims 1,17 and 22 rejection above) and further in view of Sakumoto et al. (Sakumoto) (U.S. Patent no. 6449583).

Tsukamoto and Engelmann disclose a wrist-watch device with the characteristics described above (see rejection above as pertained to claims 1,

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2,17, and 22). Though it should be inherent by the definition of timepiece (wristwatch) that adjustment for time and date is included with the timepiece referred by the reference, Tsukamoto does not specifically disclose a wristwatch device, where the time display member comprises a second hand and the timepiece control unit controls the second hand to perform an irregular movement in accordance with said comparison result data, nor does he disclose a wrist-watch device where the timepiece control unit controls the second hand to move a predetermined distance in accordance with the stored data. Engelmann teaches of a wrist-watch device having a wireless communication function (see col. 1, lines 6-11) where the timepiece further includes a clockwork movement and coupled to indicators forming respectively an hour hand, a minute hand and a second hand which can be adjusted (see fig. 1, col. 3, lines 17-20, and 26). If the hands as described by Engelmann can be adjusted, one skill in the art could conclude that such adjustment may be set to a predetermined time and/or distance. It would have been obvious to one skill in the art to combine the above references because by using the indicators, the user of such device would have access, simultaneously and with great ease, to a plurality of different services (see Engelmann col. 2, lines 37-38). However, the combination fails to disclose if the wireless communication function, further comprising restarting time display after controlling said time display member to display information in accordance with said stored data for a predetermined, and a timer that counts a predetermined time period. The combination also fails to disclose if the time display comprises of a stop-watch

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indicator hand and a stop-watch dial. However, Sakumoto discloses a wrist watch device comprises an input section, a measurement section for performing measurement of a time or a period of time, a display section for providing various displays, and a control section for controlling each of these sections. The input section includes a mode button to be used by a user for performing various mode-setting operations, and a start button, a stop button, a lap button, and a reset button to be used by a user for inputting a start command, a stop command, a lap command, and a reset command for the stopwatch functions (e.g. A user can set a period of time (i.e. predetermined) and a calculation scheme for the statistical data via the input section) (see fig. 1, col. 4, lines 21-45). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to improve upon the wrist-watch device as taught by the combination by implementing the characteristics of Sakumoto's wrist watch because the implementation would reduce the burden imposed on a user, while allowing a user to immediately confirm measured data and statistical data with the high reliability immediately when required to do so (see col. 2, lines 7-10). Note: this rejection can further be based on the inherency of the characteristics of a stop-watch.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Sakumoto et al. (U.S. Patent No. 6449583) "Portable measurement apparatus." Goto (U.S. Patent No. 6392613) "Portable electronic device."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Louis Desir whose telephone number is 703-605-4312. The examiner can normally be reached from Monday-Friday 0800-1600.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R Hudspeth can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pairdirect.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (tollfree).

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